

signal is overmodulated, deliberate clipping. Flat-top modulation is, therefore, characteristic in an amplitude-modulated signal.

ability to uniformly transmit a signal over a wide frequency band.

A transmission line that carries a signal over a wide frequency band. Also see MATCHING.

2. See FLAT-RIBBED.

a substance that can be used as a mechanical failure mode.

ument that uses ultrasonic internal flaws in materials by flaws.

DT-LAMBERT.

Under conditions of operation in a ferromagnetic material, the activity is directly proportional to the magnetic field. See FLEMING'S.

de A simple way of determining the relationships in the behavior of motors. If the thumb of the left hand is at right angles to the index finger, the middle finger will point in the direction of the flux; the middle finger will point in the direction of current flow.

HAND RULE.

See FLEMING'S.

rule A simple

relationships in the behavior of motors and generators. The thumb, index, and middle fingers are positioned so that the thumb points in the direction of the flux, the index finger points in the direction of the current flow, and the middle finger points in the direction of the motion of the conductor.

RULE.

See FLEMING'S.

rules A set

frequency response.

AUDIBILITY

The ability of a system to reproduce a signal without distortion.

different tasks.

is simply a comparison of the

viscous and elastic properties of a material.

used some

contact material.

usually by

act.

flexible coupling A device for joining two shafts and conveying rotary motion from one to the other; it is elastic, so the shafts need not be exactly aligned with each other.

flexible flat cable See FLAT CABLE.

flexible manufacturing system A robotized manufacturing plant that can turn out a variety of different products. One or more central computers oversee the operation of the facility. Such factories are commonly used in the production of electronic devices (such as printed circuits, calculators, and portable radios).

flexible resistor An insulated, wirewound resistor that can be bent, coiled, or knotted.

flexible shaft A control shaft that can be bent somewhat while still allowing easy adjustment.

flexure A measure of how much bending a conductor or other flexible object can take without breaking.

flexible diode A diode that is flexible in that its junction resistance can be changed (i.e., reversed without reversing leads, its resistance being variable from the forward- to backward-resistance value).

1. A tendency for a video image to appear, disappear, and reappear, or to increase and decrease in intensity frequently. **2.** The effect created by such action (as in a flickering light).

frequency The number of times the illumination flashes on and off in the projection of a motion picture. It is 48 per second (twice the frame rate) in conventional movie projectors; for each frame, the screen is blanked when the frame is pulled into position and again during projection of the frame.

flight control Electronic monitoring and control of an aircraft in flight.

flight plan The course planned for an aircraft's flight.

flight computer A computer that controls the operation of an aircraft in flight, from takeoff to landing.

flight deviation The departure of an aircraft from the course in the flight plan. **FLIGHT PATH.**

flight indicator meter An instrument that gives a visual indication of the departure of an aircraft from the course in the flight plan.

flight service A remotely controlled system for maintaining and repair space vehicles. The machine can be controlled by a computer program or by a human operator.

flight simulator Most sophisticated machines can simulate flight and/or TELEPRESENCE.

flight training A person can perform dangerous work without being placed at personal risk.

flight test Any test made as in 1. **2.** Any test made as in 1. **3.** Any test made as in 1.

floating magnetic compass A metal bar that is free to rotate about the vertical component (inclination) of the earth's magnetic field. The bar is usually made of a material that is differently in different geo-

graphic locations, because the inclination varies from place to place. Inclination is greatest near the geomagnetic poles, and is zero at the geomagnetic equator.

float glass A hard, bright, lead glass. Dielectric constant, 7 to 9.9. Dielectric strength, 30 to 150 kV/mm. Also see GLASS.

flip chip A monolithic semiconductor device (such as a diode, transistor, or integrated circuit), in which bead-like terminals are provided on one face of the chip for bonding.

flip-chip bonding A scheme for making connections between a semiconductor chip and a header, in which leads are not run between chip and header. Instead, bead-like projections are electrodeposited as terminals around one face of the chip, which is then registered with the header terminals and bonded to them.

flip-flop 1. See BISTABLE MULTIVIBRATOR. 2. A two-position relay that locks in alternate positions upon receiving successive actuating pulses.

flip-flop key In a video display, a key that, when pressed, allows viewing of one half of the screen and then the other.

flip-flop memory A bistable computer memory that stores bits of data as flip-flop states.

flip-flop relay See BISTABLE RELAY.

float charging The constant charging of a storage battery, keeping the battery at or near the fully charged state at all times.

floating battery A storage battery connected in parallel with a generator, which supplies the load; the battery, always completely charged, helps during high-current demands.

floating 1. To float a storage battery; see FLOAT. 2. An ungrounded device, or circuit that is not connected to a source of voltage. 3. Not loaded or driven. 4. Not fixed in position. 5. A dedicated ground connection that remains isolated from the common circuit ground.

floating address See RELATIVE ADDRESS.

floating charge See TRICKLE CHARGE.

floating control 1. A potentiometer, such as a gain control, installed with its shaft insulated from ground and, accordingly, subject to body-capacitance effects. 2. A type of automatic control in which the rate of final control element movement depends on the amount that the controlled variable deviates from a prescribed value.

floating ground See FLOATING, 5.

floating input An ungrounded input circuit.

floating-input measurement See DIFFERENTIAL-INPUT MEASUREMENT.

floating instrument An instrument whose signal terminals are above ground.

floating I/O port An input/output (I/O) terminal that is not loaded or being driven.

floating junction A junction (in a semiconductor device, for example), that has no net current flowing through it.